PRICE H Distinction of Electronics Parts Class

The adjustment levels listed in the PRICE H pull down menu are based upon U.S. Government specifications for electronic components, described as Government Standards below. (Other governments apply similar specifications.)

The Commercial Descriptions listed below suggest comparable specifications used in a commercial environment.

For each Quality Adjustment level listed, the Applications section describes electronic items that might warrant the corresponding Quality Adjustment.

S Level S-1 Level

B Level B-1 Level B-2 Level

D Level D-1 Level

S Level

Government Standards: Procured in full accordance with MIL-M-38510, Class S requirements. Class S listing on QPL-38510.Traceability, lot traveler, failure analysis, x-ray, 240 hr burn-in, 100% bond pull, certification.

Commercial Description: This level is not normally applicable in a commercial environment.

Applications: Qualified Parts List (QPL) spacecraft and other very long life projects.

S-1 Level

Government Standards: Procured in full compliance with the requirements of MIL-STD-975 (which is now obsolete) or MIL-STD-1547 and have procuring activity specification approval.

Commercial Description: Very, very high quality parts characterized by custom testing; highest reliability; selection of best parts is normal

Applications: This level applies to very, very high reliability projects, e.g. manned spacecraft.

B Level

Government Standards: Procured in full accordance with MIL-M-38510, Class B requirements. Class B listing on QPL-38510. Traceability, source inspection, 160 hr burn-in. Please note that in some cases, vendors accelerate this to a 24 hr burn-in at a slightly higher temperature.

Commercial Description: Very high quality parts; full specification testing and burn-in; very high reliability parts; selected parts.

Applications: This level applies to parts used in places that are not normally accessible (e.g. underwater or buried); high reliability required.

B-1 Level

Government Standards: Fully compliant with all requirements of paragraph 1.2.1 of MIL-STD-883 and procured to a MIL drawing, DESC drawing or other government approved documentation.

Commercial Description: High quality parts; reliability rather than cost is a major qualifier.

Applications: High reliability items, e.g. civil aircraft, safety equipment.

B-2 Level

Government Standards: NOT fully compliant with requirements of paragraph 1.2.1 of MIL-STD-883 and procured to government approved documentation including vendor's equivalent class requirements.

Commercial Description: Selected components chosen for reliability to decrease maintenance costs; long life equipment.

Applications: Equipment that is subject to long "ON" periods, e.g. elevators.

D Level

Government Standards: Hermetically sealed parts with normal reliability screening and manufacturer's quality assurance practices. Non-hermetic parts encapsulated with organic material must be subjected to 160 hours burn-in at 125 degrees C. 10 temperature cycles (-55C to 125C) with end point electrical and high temperature continuity test at 100 degrees C.

Commercial Description: Quality components; brand name; reliable; identifiable.

Applications: Professional equipment.

D-1 Level

Government Standards: Commercial (or non-mil standard) part, encapsulated or sealed with organic materials (e.g. epoxy, silicone or phenolic).

Commercial Description: Commercial grade components; some infant mortality allowed.

Applications: Commercial or home equipment.